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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,933	10/01/2003	Richard H. Boivie	YOR920030398US1 (8728-647)	9603
46069 7590 04/23/2007 F. CHAU & ASSOCIATES, LLC 130 WOODBURY ROAD WOODBURY, NY 11797			EXAMINER ALMEIDA, DEVIN E	
			ART UNIT 2132	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/677,933

Applicant(s)

BOIVIE ET AL.

Examiner

Devin Almeida

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 13-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is in response to the papers filed 2/15/2007. Claims 1, 3-11, and 13-22 were received for consideration. No preliminary amendments for the claims were filed. Currently claims 1, 3-11, and 13-22 are under consideration.

#### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of new grounds of rejection. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

#### ***Claim Objections***

Claim 11, and 22 are objected to. The phrase "and performing inline decryption of the copy of said authorized code **is** said protected memory" does not makes sense the phrase is going to be construed as "and performing inline decryption of the copy of said authorized code **in** said protected memory".

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claim 1, 11, and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With respect to claim 1, 11, and 22 the claim does not cover the else of the if statement. What happens if the original digital signature is not verified.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-11 and 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ober et al (U.S. Patent # 6,397,331) in view of Morgan et al (U.S. Patent # 6,185,685). With respect to claims 1, 11 and 22, a method for ensuring that a processor will execute only authorized code, said method comprising: applying an original digital signature (see column 2 lines 4-19 and 55-58) to all authorized code (see column 2 lines 4-19 and 55-58 i.e. application program or encryption algorithm); storing said signed authorized code in a protected memory (see column 2 lines 4-19 and 55-58), wherein said protected memory is cryptographically protected (see column 2 lines 4-19 and 55-58 i.e. digital signed is a type of cryptographically protected); preparing to execute code from the protected memory by verifying a digital signature used to sign said code in accordance with a public key, which corresponds to said original digital

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signature (see column 3 lines 46-62); and if said original digital signature is verified, then branching to a copy of said authorized code in said protected memory to begin execution (see column 3 lines 46-62 i.e. ready to execute). Ober does not teach performing inline decryption of the copy of said authorized code in said protected memory. Morgan teaches using a symmetric key to encrypt and decrypt the encrypted public key (Ober's encryption algorithm that gets digital signed) (see Morgan column 8 line 60 - column 9 lines 31). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to have used a symmetric key to encrypt and decrypt the encrypted public key (Ober's encryption algorithm that gets digital signed) to increase the security to the encryption algorithm (see Morgan column 2 lines 32-65). Therefore one would be motivated to have encrypted the authorized code with a symmetric key before storing it in the protected memory and decrypted the authorized code with the symmetric key for execution of the authorized code.

With respect to claims 3 and 13, wherein the integrity of the contents of said protected memory is protected by encryption (see column 1 line 56 – column 3 line 62).

With respect to claims 4 and 14, wherein said protected memory is physically protected (see column 1 line 56 – column 3 line 62).

With respect to claims 5 and 15, wherein said public key is stored in said protected memory (see column 1 line 56 – column 3 line 62).

With respect to claims 6 and 16, wherein the integrity of said authorized code is protected at run time (see column 1 line 56 – column 3 line 62).

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With respect to claim 7 and 17, A method as recited in claim 16 wherein the integrity of said authorized code is protected with symmetric key encryption (see Morgan column 8 line 60 - column 9 lines 31).

With respect to claims 8 and 19. A method as recited in claim 18 wherein the privacy of said authorized code is protected at run time with symmetric key encryption (see Morgan column 8 line 60 - column 9 lines 31).

With respect to claims 9 and 20. A method as defined in claim 11, further comprising: storing code in the protected memory with an original digital signature corresponding to an Owner Public Key; and verifying the Owner Public Key in accordance with a Manufacturer Public Key, which is resident on the processor, and then verifying the original digital signature in accordance with the Owner Public Key.

With respect to claims 10 and 21, reading a Certificate containing an Owner Public Key; validating the Certificate with the Manufacturer Public Key; finding the Owner Public Key in the Certificate that matches the Owner Number in the processor; and using the matched Owner Public Key to verify the authorized code.

With respect to claims 18, wherein the privacy of said authorized code is protected at run time (see column 1 line 56 – column 3 line 62).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devin Almeida whose telephone number is (571)270-1018. The examiner can normally be reached on Mon-Thur 7:30-5:00 Second Fri 7:30-4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571)272 3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Devin Almeida  
Patent Examiner  
4/18/2007



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